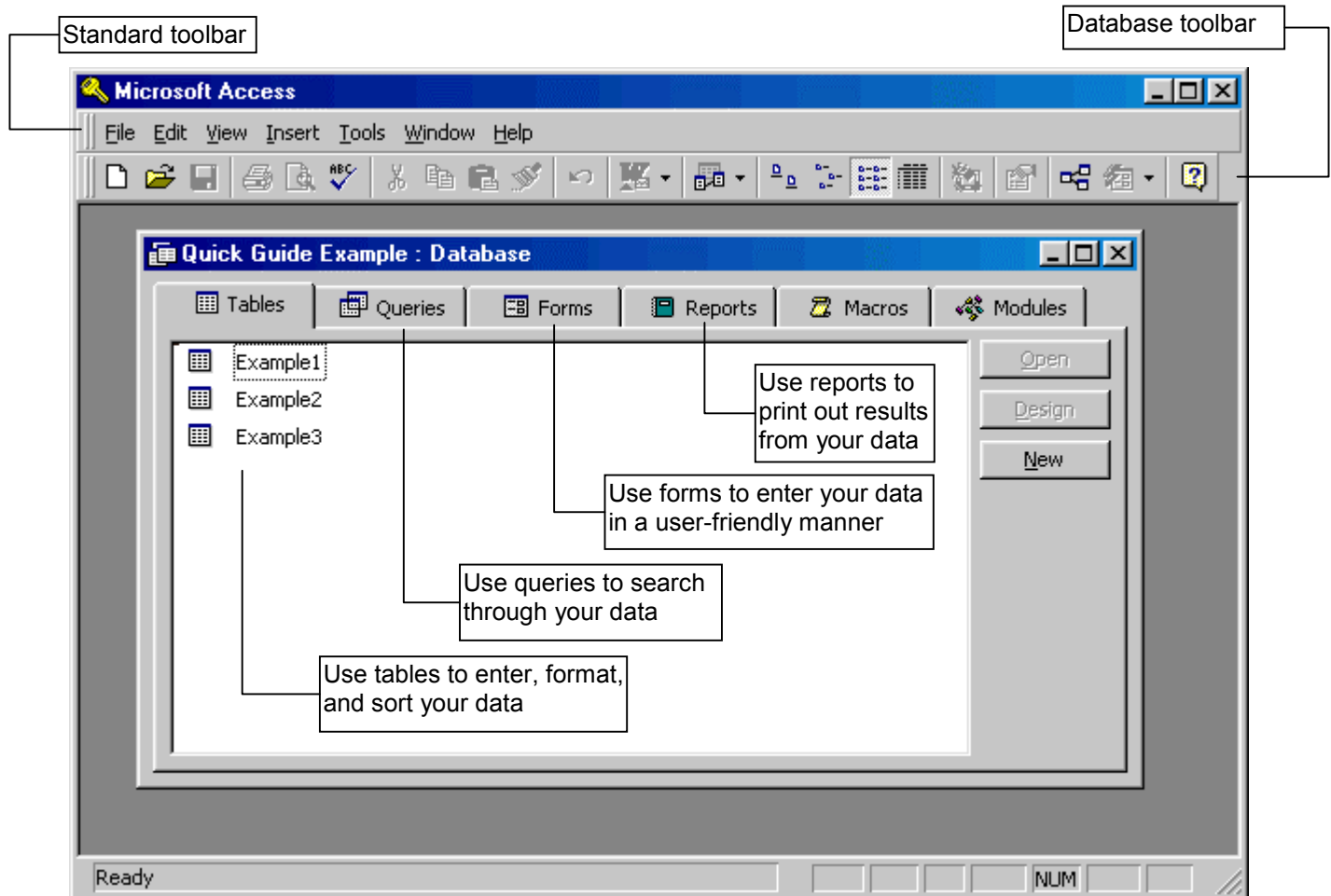


Using Access 97

Microsoft Access is a **database** program. It can be used to store all types of data, which can then be sorted, searched, and printed out in reports. Compared to the other Office programs (Word, Excel, and PowerPoint) I think Access is more difficult. However, this guide should help to get you started into the basics of Access. The main screen is shown below:



The Access Database Structure

It is best to begin by getting an overview of what makes up the database. First we will look at four data structures in Access.

- Inside of the database you have **Tables**. Each table is a collection of data. For example you could have a table of information for your 3rd period class or for math supplies or for science lesson plans.
- Inside of each table you have **Fields**. A field is an individual type of data. For example in a table of student information you might have fields for last name, first name, address, phone number, gender, and such.
- Each field is then made up of **Entries**. Each entry is an individual piece of data. For example, in the field "First Name" you might have such entries as Tom, Kristen, Pete, and Melissa.

- Another way to look at the data in the table is in **Records**. A record is a collection of one entry from each field, making up the data for one “person” as in the example we have been using. Tom would have a record consisting of the entries Smith, Tom, 123 Main St, 555-1234, Male, and so on.

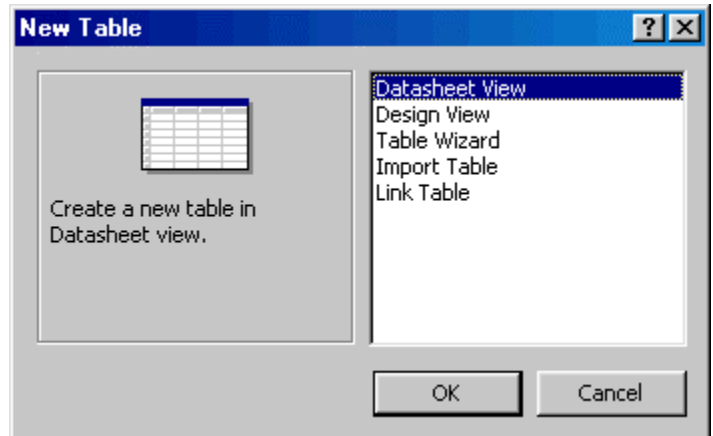
Although not part of the actual data, there are other elements in the database. Next we will look at three items that help you work with the data.

- **Forms** are “pretty” screens that allow you to enter data into the table without having to be in the somewhat “unattractive” datasheet view. Basically they are just a user-friendly interface between you and the raw data.
- **Queries** are searches you can run on your data to bring back just the data that meets your conditions. You can make queries to find data that is above a certain value, or contains a certain name, or happened before a certain time, plus much more.
- **Reports** are used to print out the raw data or just the data that the query returned. You can format the report to look any way you wish.

Making A Table

The first thing you will want to do with Access is to make a table to hold your data. To do that:

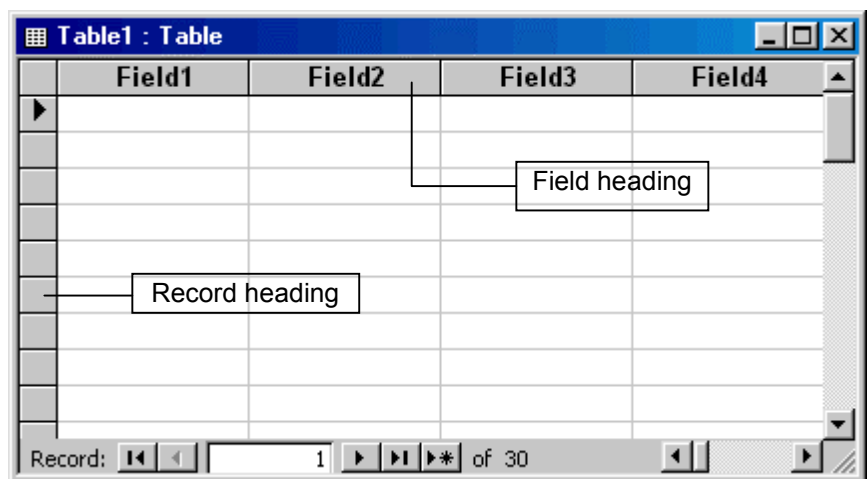
- 1) Make sure you are in the **Tables** tab of the Access window.
- 2) Click the “**New**” button.
- 3) Choose how you want to make your new table, probably **Datasheet View** or **Design View**. These will be explained below.
- 4) Click “**OK**”.



Working With Your Table In Datasheet View

Datasheet view is the most basic way to enter and interact with data. In this view each **column** is a different **field** and each **row** is a different **record** and each **box** is a single **entry**.

Datasheet view allows you to do many things with your data as described below.



Name Fields

Each column is a field, although you can change its name to something more descriptive. To do this, just double-click on the column heading, and then type in the new name for that field.

Enter Data

You can enter data into the datasheet simply by typing it into the cells.

Add New Fields

If later you find that you need to add an additional field you can do this by right-clicking on any column heading, and then choosing **Insert Column**.

Delete A Field

You can delete a field by right-clicking on the field's column heading and then choosing **Delete Column**. Be sure you want to do this, because there is no way to retrieve the data when it is deleted.

Delete A Record

You can get rid of a record by right-clicking on the row heading for that record and choosing **Delete Record**. Again, when it is deleted, you can not get the data back, so use with care!



Change Column Width

If you are having a difficult time seeing all the data in one of the fields, you can adjust the column width. To do this just position the mouse pointer right **between** two column headings. When you do this the **pointer will change shape** to a right-to-left arrow (↔). Now just **click and hold down** the left mouse button and move the mouse side to side to adjust the width to its new size

Sort Data

When you get a lot of data you may wish to put it in a certain order. This could be just so you can find items easier, or it could be to try to answer a certain question you have about the data.


Whatever the case you can put the data in order by doing the following:

1. Click with your mouse anywhere in a column that you want to sort.
2. Click on the “**A to Z**” button  to sort the data from small to big or in normal alphabetical order.
3. Click on the “**Z to A**” button  to sort the data from big to small or in reverse-alphabetical order.

Working With Your Table In Design View

Although there is a lot you can accomplish in Datasheet view, there are some tasks that need to be done elsewhere. **Design view** allows you more control over the structure of your table.

To get into Design View you have two options.

- 1) With your table open click on the **View** option in the top toolbar, and then choose **Design View** from the drop-down menu.
- 2) Or you can just click on the **Design View button**  on the left end of the toolbar.


Probably what you will do most in Design view is to **change the data type** for a field. Normally a field is just text, but you may need to make it into some other type of format. To do this:

- 1) Click in the cell in the **Data Type** column that corresponds to the field you wish to change.
- 2) Click on the down-black-arrow in that cell.
- 3) Choose the data type you want from the drop-down menu

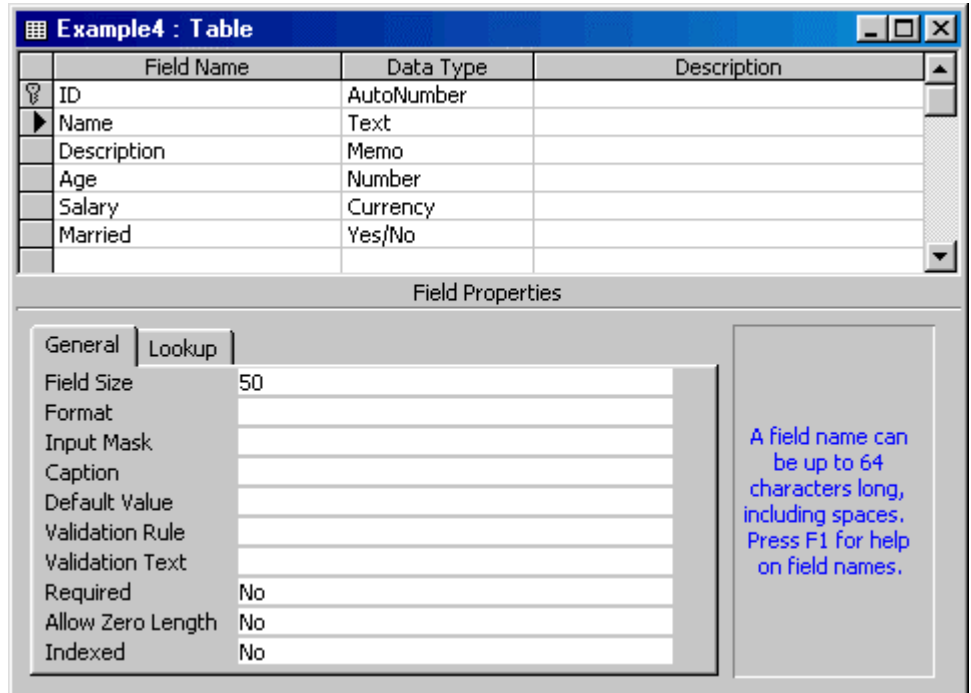
Here are the most common data types you can choose from and what they mean:

- 1) **Text** Up to 255 characters
- 2) **Memo** Like text, but can have up to 64,000 characters
- 3) **Number** Numerical data
- 4) **Date/Time** Can be used for dates and/or times
- 5) **Currency** Money
- 6) **AutoNumber** A number that Access automatically increases with each new record
- 7) **Yes/No** Makes a checkbox for you to check for “yes” or leave blank for “no”

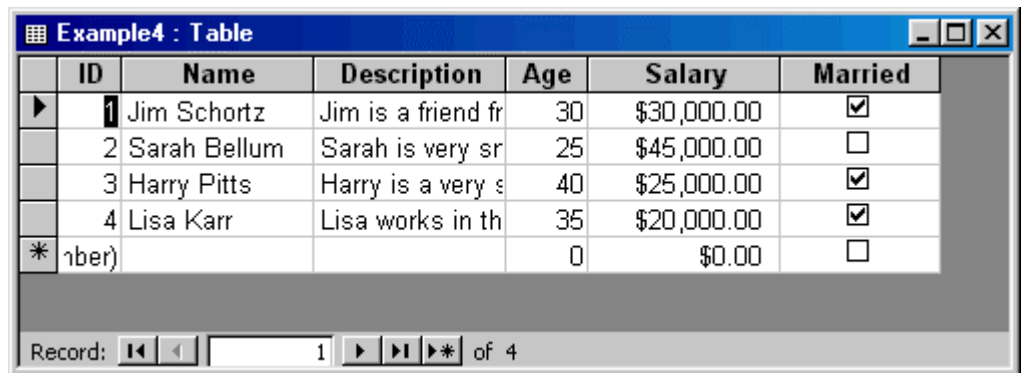
To get back to Datasheet view you have the same options as before:

- 1) Click on the **View** option in the top toolbar, and then choose **Datasheet View** from the drop-down menu.
- 2) Or you can just click on the **Datasheet View** button  on the left end of the toolbar.

The Design View window is shown to the right.



The example to the right is of what your datasheet view may look like after making the data type changes and adjusting column widths.



Printing Reports

When the time comes to print out the data you have collected, Access can guide you through making a report. To do this follow these steps:

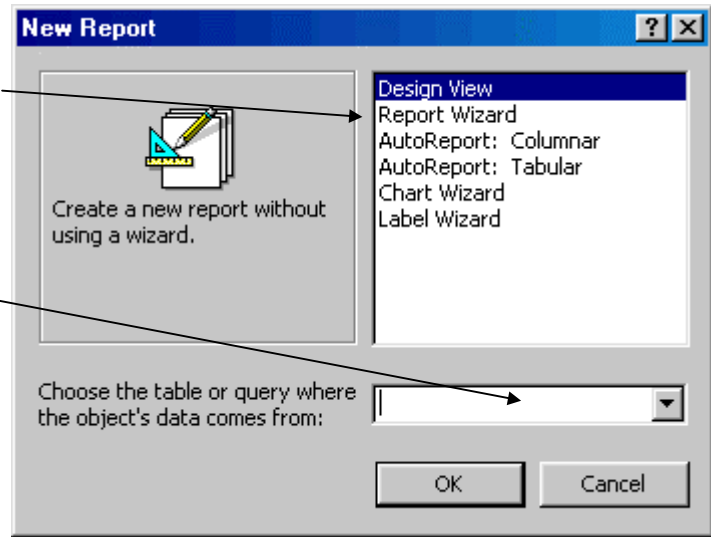
- 1) Click on the **Reports** tab in your database window. This is the fourth tab over, beginning with Tables, then Queries, then Form, and then Reports.
- 2) Now click on the **New** button on the right hand side of the window.

3) You will now get the **New Report** window.

It is probably best to choose **Report Wizard** out of the options you have.

Then you will want to click on the black-down-arrow at the bottom of the window to **pick the table** you wish to make a report from.

Click **OK** to continue.

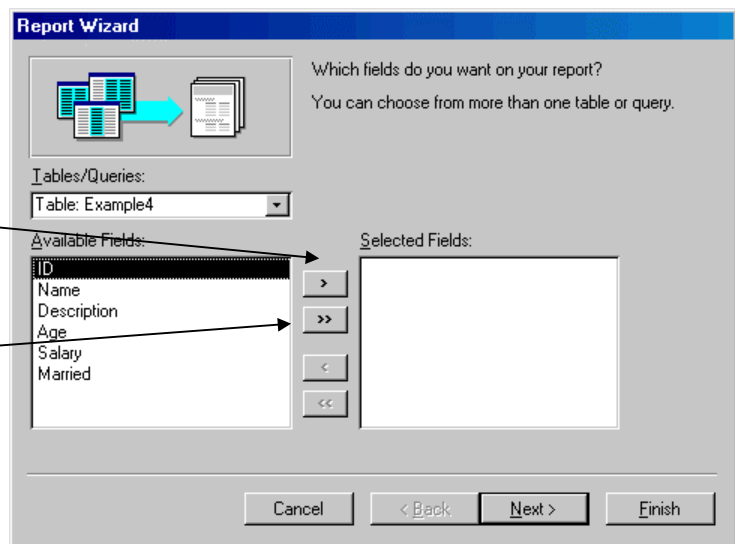


4) In the next window you now get to choose which fields you want to have in the report.

To add fields one at a time, highlight a field name by clicking on it, and then click on the **single arrow button** to move it over to the **Selected Fields** box.

To include all the fields just click on the **double-arrow button**.

Click **Next** to continue when done.

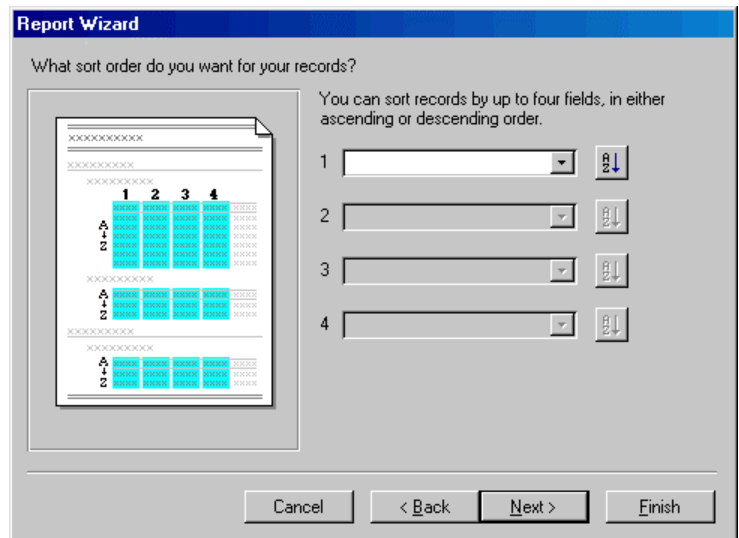


5) Next is the **Grouping Levels** window where you can choose if you want your report broken into subgroups based on one or more fields. I do not use this option very often, so you probably do not need to worry too much about it. Just click **Next** to move on.

6) Next is the **Sort Order** window. Here you can choose which fields to sort by.

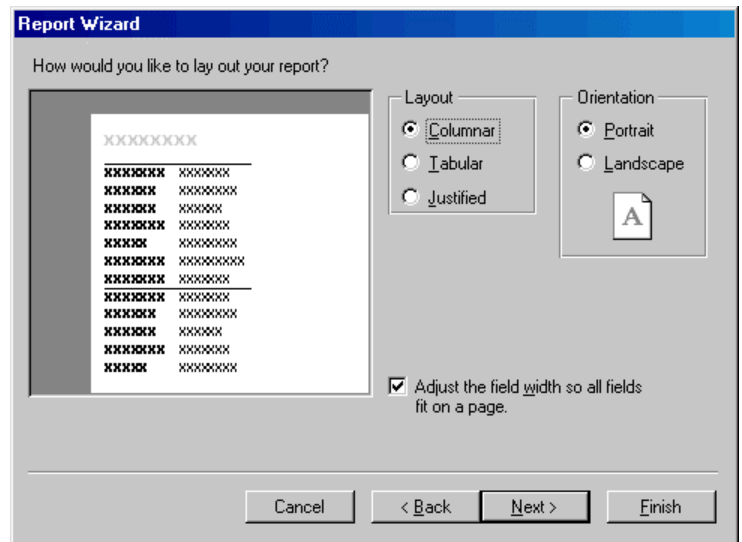
For example, if you have a field called "Last Name" and you would like all the results to be in alphabetical order based on the people's last names, then you can click on the down-black-arrow for option 1 and choose that field out of the drop down list.

For reverse order, click on the **A to Z** button to toggle it to **Z to A**. For extra sort criteria use options 2, 3, and 4.



- 7) Next you get to choose the type of layout you want for your report. There are three options:
- Columnar** – lists each record in a vertical column entry by entry.
 - Tabular** – prints out all the data in a row and column layout like datasheet view
 - Justified** – puts each record in a nice looking box for a more professional appearance


Click **Next** to move on after making your selection.

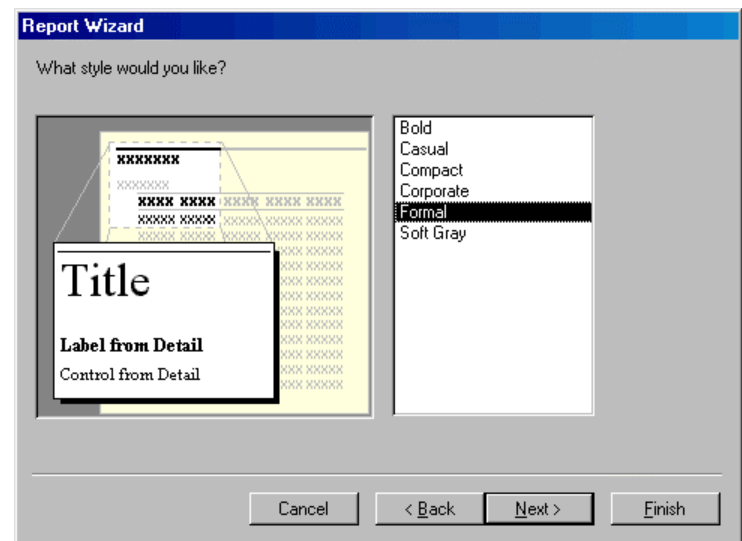


- 8) Next you get the **Style** window where you can pick between several different types of report styles from simple to elegant.

Click on the **Next** button when you have chosen the style you want.

- 9) Finally you will get a window where you can give the report a different name if you wish and then click **Finish** to create the report.

You can print the report by clicking on your **Print icon**  or by choosing **File** in the top menu bar and then **Print** from the drop down menu.



Questions, comments, concerns? Email me at:
 ecurts@neo.rr.com or tech@viking.stark.k12.oh.us
 Copyright 2000-2001 – Eric Curts